

### **REMARKS**

This Amendment responds to the Office Action mailed April 17, 2008 in the above-identified application. Based on the foregoing amendments and the following comments, reconsideration and allowance of the application are respectfully requested.

Claims 1-3, 6-15 and 18-24 were previously pending in the application. By this Amendment, claims 1, 13 and 24 have been amended. Accordingly, claims 1-3, 6-15 and 18-24 are currently pending, with claims 1, 13 and 24 being independent claims. The amendments find clear support in the original application at least in Fig. 4 and pg 11, lines 3-16. No new matter has been added.

The Examiner has rejected claims 1-3, 6, 7, 9-15, 18, 19, and 21-24 under 35 U.S.C. §103(a) as unpatentable over Levin (US 6,639,906) in view of Bultan et al. (US 7,206,335). Claims 8 and 20 are rejected under 35 U.S.C. §103(a) as unpatentable over Levin in view of Bultan et al., further in view of Komatsu (US 6,816,542). The rejections are respectfully traversed in view of the amended claims.

Levin describes a system for performing digital receive processing for multiple signals received over the same RF band (col. 3, lines 27-29). A demodulator shown in Fig. 5 includes XOR banks 204-210 which generate offset despread data (col. 8, lines 29-39). An early interpolation circuit 212, an on-time interpolation circuit 214 and a late interpolation circuit 216 interpolate the outputs of XOR banks 204-210 (col. 8, line 66 to col. 9, line 30).

Bultan describes a digital timing synchronizer of a receiver for timing synchronization to a transmitter in a wireless communication system, wherein the received signal has a timing error with respect to a reference code. A channel estimator estimates an initial code phase of the received signal. A code generator generates a timing reference code that is adjustable by integer increments. An interpolation feedback circuit is configured for interpolation and correction of the timing error, whereby the interpolation is achieved through an integer code shift, plus a quantized fractional delay estimate selected from a look-up table of quantized values of fractional delay estimates associated

with predetermined interpolator coefficients, from which a time corrected version of the received signal is produced (col. 2, lines 14-27). One function of the interpolation controller is to minimize interpolator coefficients (col. 5, lines 54-56). The interpolation coefficients are selected to minimize an approximation error (col. 7, lines 8-20).

The Examiner acknowledges that Levin fails to disclose a method wherein interpolating the two or more despread results includes selecting interpolation coefficients based on the previously estimated finger location. However, the Examiner asserts that Bultan teaches this limitation. Applicant must respectfully disagree. Bultan describes chip rate interpolation rather than interpolation after completion of despreading, as is apparent from the fact that received signal 21 is provided directly to interpolator 14 in Fig. 1. Furthermore, Bultan indicates that the timing error estimate is in a range of  $-T_c$  to  $T_c$ , where  $T_c$  is the duration of one chip period (col. 3, lines 18-35). Thus, Bultan does not disclose or suggest a method for processing a spread spectrum baseband signal "wherein interpolating the two or more despread results includes ... selecting interpolation coefficients based on the previously estimated finger location, *after completion of despreading*, as required by amended claim 1. Since Levin fails to teach selecting interpolation coefficients based on the previously estimated finger location and Bultan describes the prior art method of chip rate interpolation, the skilled person would not be led to the claimed invention by the combined teachings of Levin and Bultan. For at least these reasons, amended claim 1 is clearly and patentably distinguished over Levin in view of Bultan, and withdrawal of the rejection is respectfully requested.

Claims 2, 3 and 6-12 depend from claim 1 and are patentable over the cited references for at least the same reasons as claim 1.

Amended claim 13 is directed to apparatus for processing a spread spectrum baseband signal and contains apparatus limitations that parallel the method of limitations of claim 1. Levin and Bultan, taken individually or in combination, do not disclose or suggest means for interpolating two or more despread results, wherein the interpolating is performed after completion of the despreading and wherein the means for interpolating the two or more despread results includes means for

selecting interpolation coefficients based on the previously estimated finger location, as required by amended claim 13. For at least these reasons and for the reasons discussed above, amended claim 13 is clearly and patentably distinguished over Levin in view of Bultan, and withdrawal of the rejection is respectfully requested.

Claims 14, 15 and 18-23 depend from claim 13 and are patentable over the cited references for the least the same reasons as claim 13.

Amended claim 24 is directed to apparatus for processing a spread spectrum baseband signal and requires, in part, means for interpolating two or more despread results, wherein the interpolating is performed after completion of the despreading and wherein the means for interpolating the two or more despread results includes means for selecting interpolation coefficients based on the previously estimated finger location.

Levin in view of Bultan do not disclose or suggest means for selecting interpolation coefficients based on a previously estimated finger location, wherein the interpolating is performed after completion of the despreading, as required by amended claim 24. For at least these reasons and for the reasons discussed above, amended claim 24 is clearly and patentably distinguished over Levin in view of Bultan, and withdrawal of the rejection is respectfully requested.

Based upon the above discussion, claims 1-3, 6-15 and 18-24 are in condition for allowance.

**CONCLUSION**

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary one month extension of time. The fee is occasioned by this response, including the one month extension fee, if not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Dated: July 17, 2008

Respectfully submitted,

By William R. McClellan  
William R. McClellan  
Registration No.: 29,409  
WOLF, GREENFIELD & SACKS, P.C.  
Federal Reserve Plaza  
600 Atlantic Avenue  
Boston, Massachusetts 02210-2206  
(617) 646-8000